

Violent mortality in Senegal: level and causes in three rural areas

Gilles PISON (1)

Géraldine DUTHE (1)

Emmanuelle GUYAVARCH (1)

Adama MARRA (2)

Jean-Philippe CHIPPAUX (2)



(1) Institut national d'études démographiques (Paris-France)



(2) Institut de recherche pour le développement (Dakar-Sénégal)

Objectives

- **There is little information on violent mortality in developing countries**
- **It is true in particular of Sub-saharan Africa**
- **Our study provides original measures of level and causes of violent mortality in several rural areas of Senegal.**

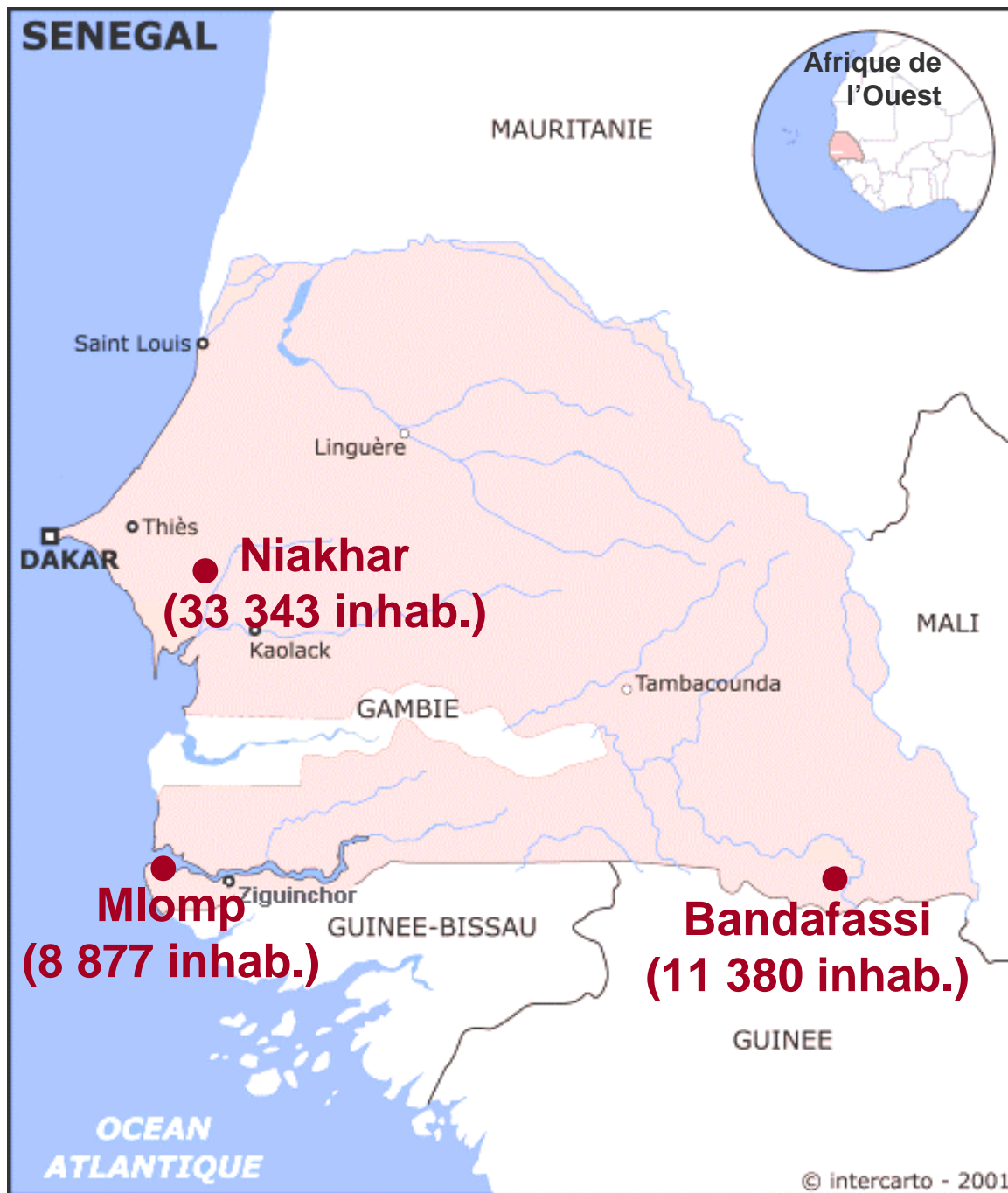
Method

- **Collection of complete data on mortality and causes of death,**
- **In three rural areas**
- **With the same method, so the measures are comparable.**

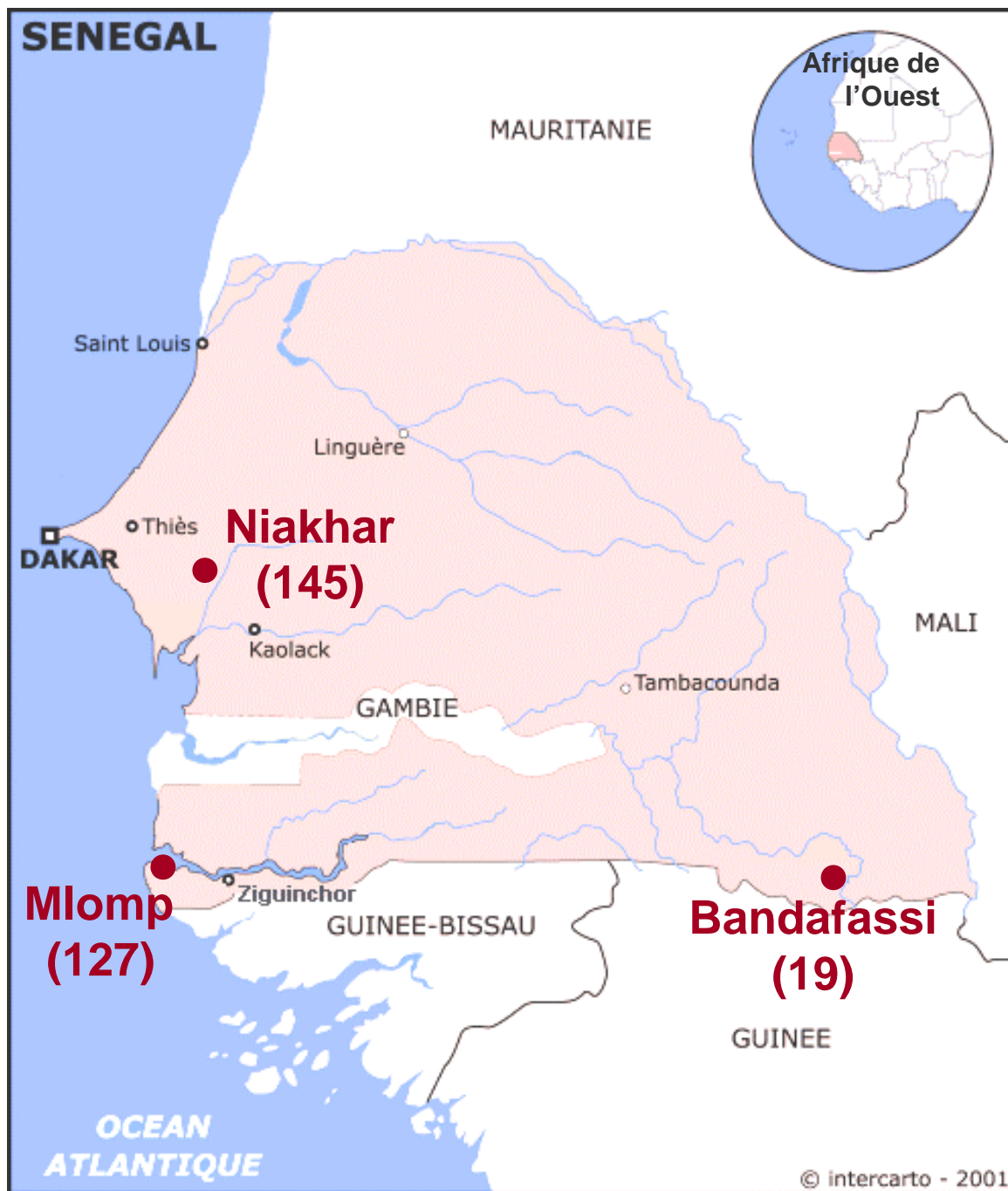


The three rural populations studied

1. Geographical location and population size on 1st January 2004



2. Population density in 2004 (inhab./sq km)



3. Environment and activities

A large, decorative yellow curved shape that starts from the left edge of the slide and curves upwards and to the right, partially overlapping the text area.

Bandafassi

- A region of forest savanna
- Land is only partly cultivated.
- There is still abundant wildlife.



- Main activities : agriculture (millet, maize, arachides, sorghum) and stock breeding.



Mlomp



- A region of mangroves cultivated for rice.
- Most of the land is cultivated.



- One of the men's main activities : collection of palm wine,
- and also fishing



Niakhar

- A region of savanna.
- Almost all the land is cultivated.



- Main activities : agriculture (millet, maize, arachides) and stock breeding.



Different levels of mortality

	BANDAFASSI 1985-2004	MLOMP 1985-2003	NIAKHAR 1985-2003
Mortality before age 5 (5q0 per thousand)	243	105	210

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Risk for a 15 year old person of dying before age 49 (35q15 per thousand) women men	206 207	95 190	148 162

Data collection method (1)

Follow up of the population



Data collection method (2)

- Repeated rounds in the villages
- To collect :
 - births,
 - deaths,
 - marriages,
 - migrations.
- For every death :

Verbal autopsy interview to determine the cause of death.

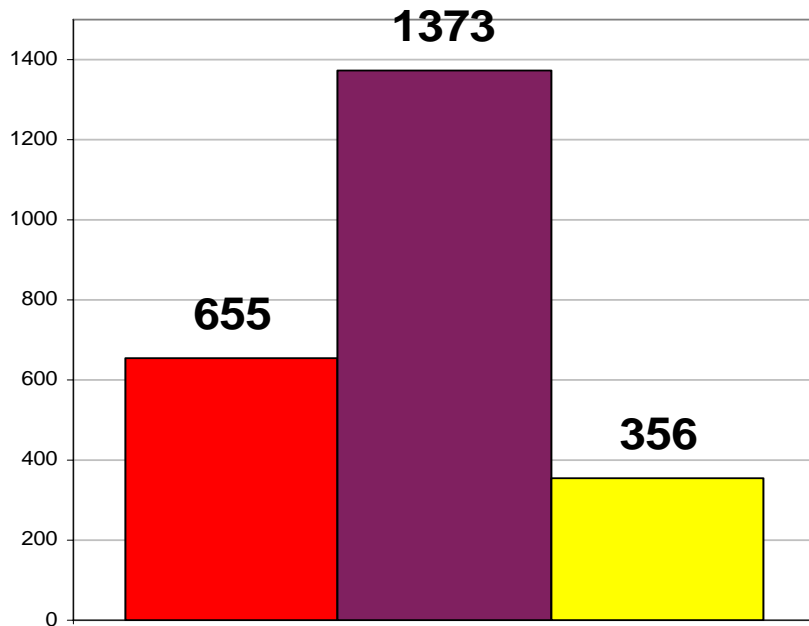


Results

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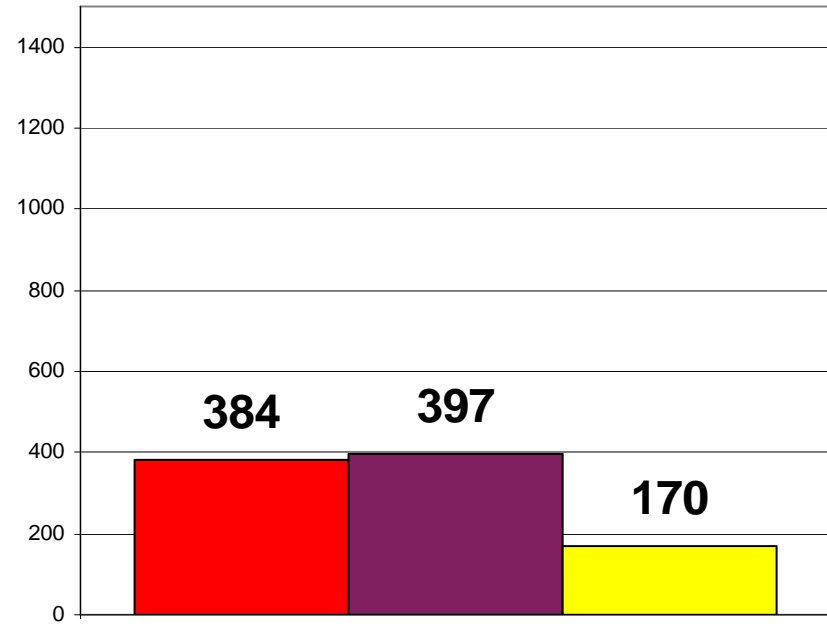
Number of violent deaths per year and per million inhabitants
(period 1985-2003)

Men



Bandafassi Mlomp Niakhar

Women



Bandafassi Mlomp Niakhar

Level of violent mortality varies
according to sex and site

Two death causes specific to Mlomp :

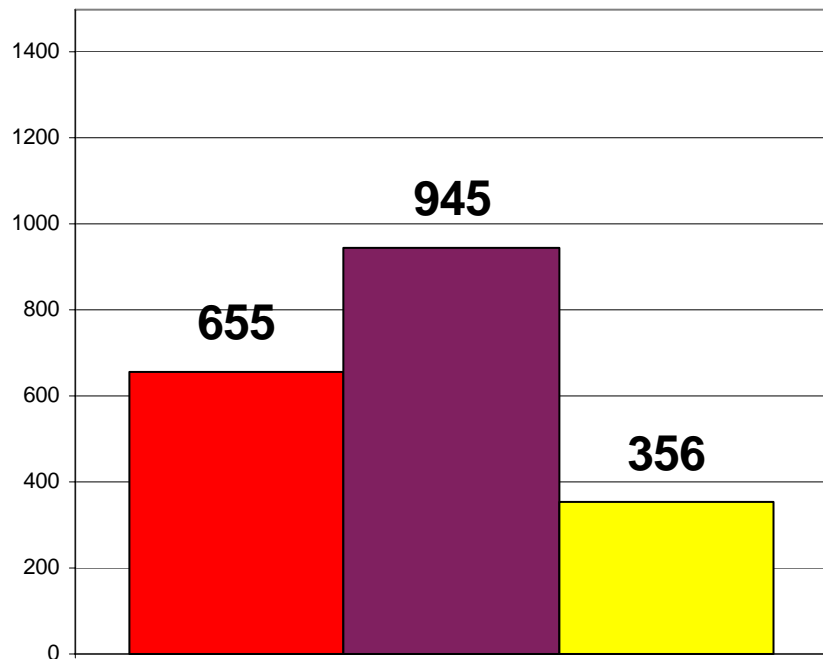
- Civil war in Casamance region : 14 deaths (only men) since 1985.



- the sinking of the boat «Joola» on 26/09/2002 : nearly 1,900 deaths, 35 being inhabitants of Mlomp (19 men and 16 women).

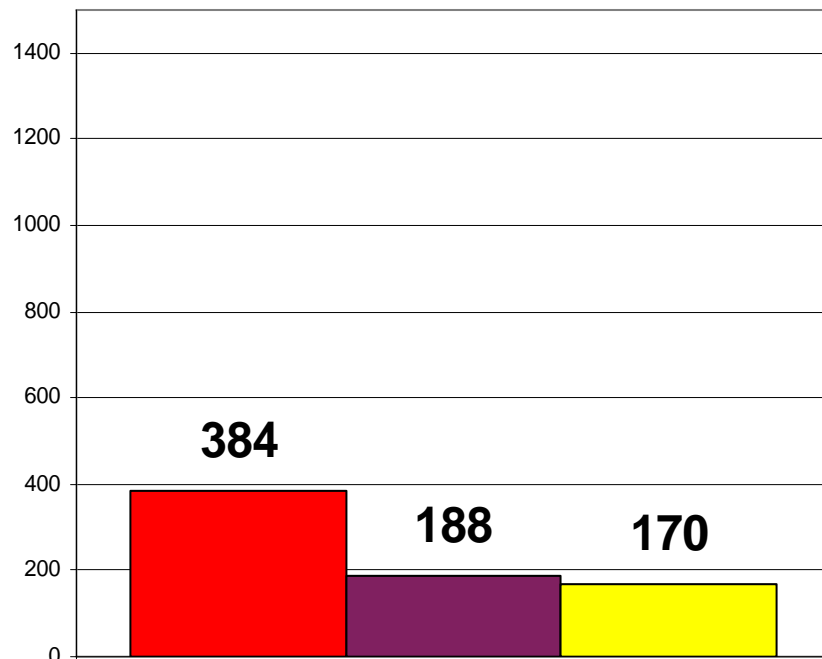
Number of violent deaths per year and per million inhabitants without the deaths from the civil war and the « Joola » tragedy (period 1985-2003)

Men



Bandafassi Mlomp Niakhar

Women



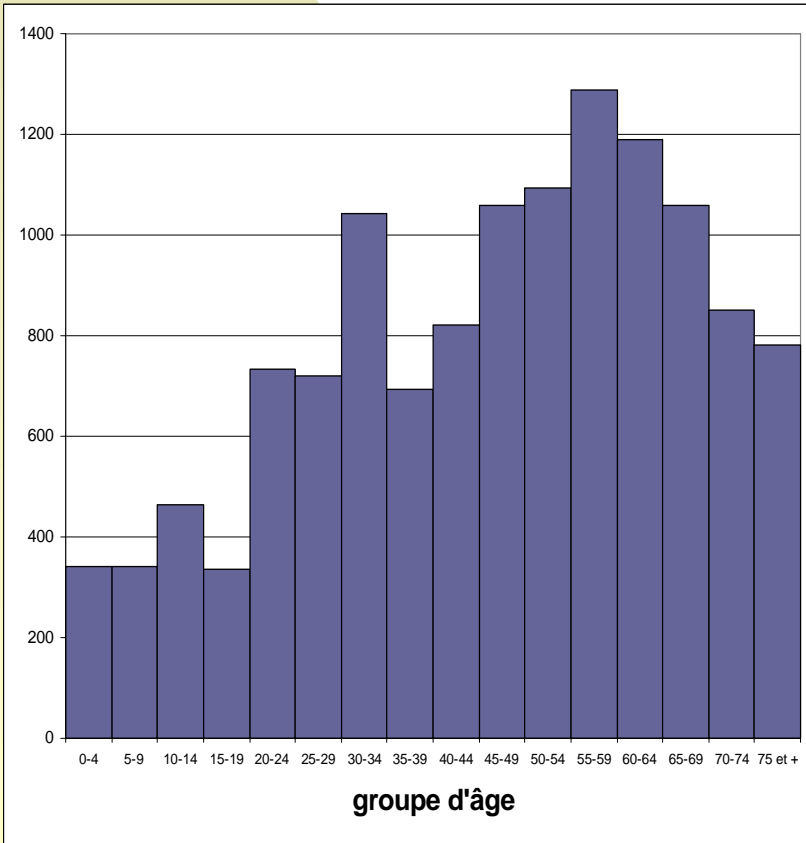
Bandafassi Mlomp Niakhar

Violent mortality stands still high among men of Mlomp

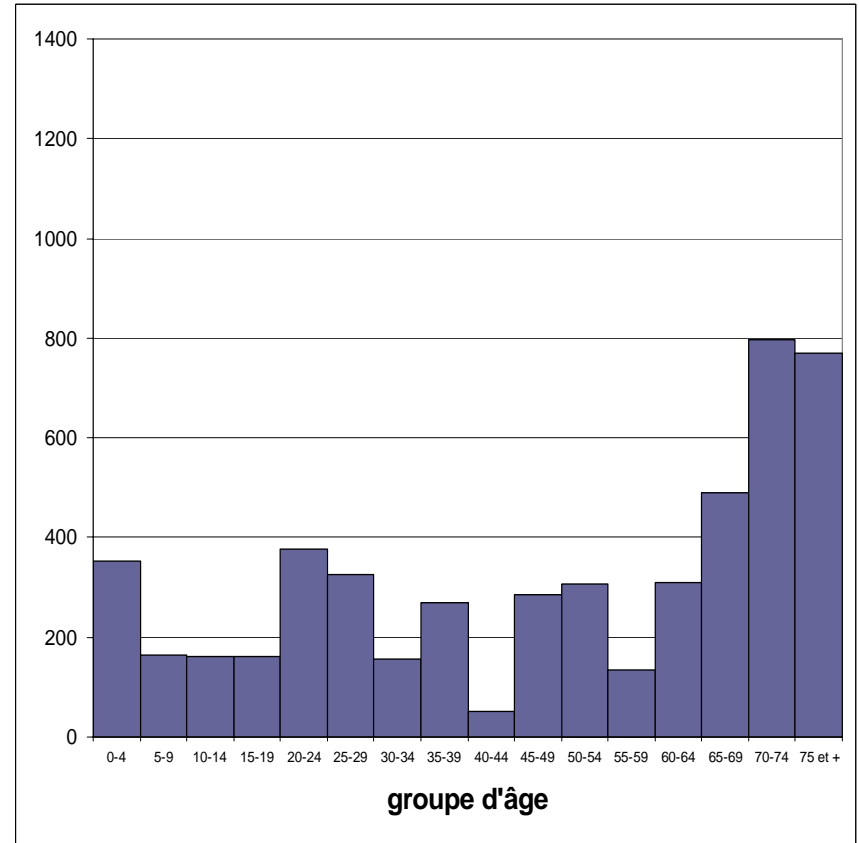
Age variations

Number of violent deaths per year and per million inhabitants (period 1985-2003, all sites)

Men



Women



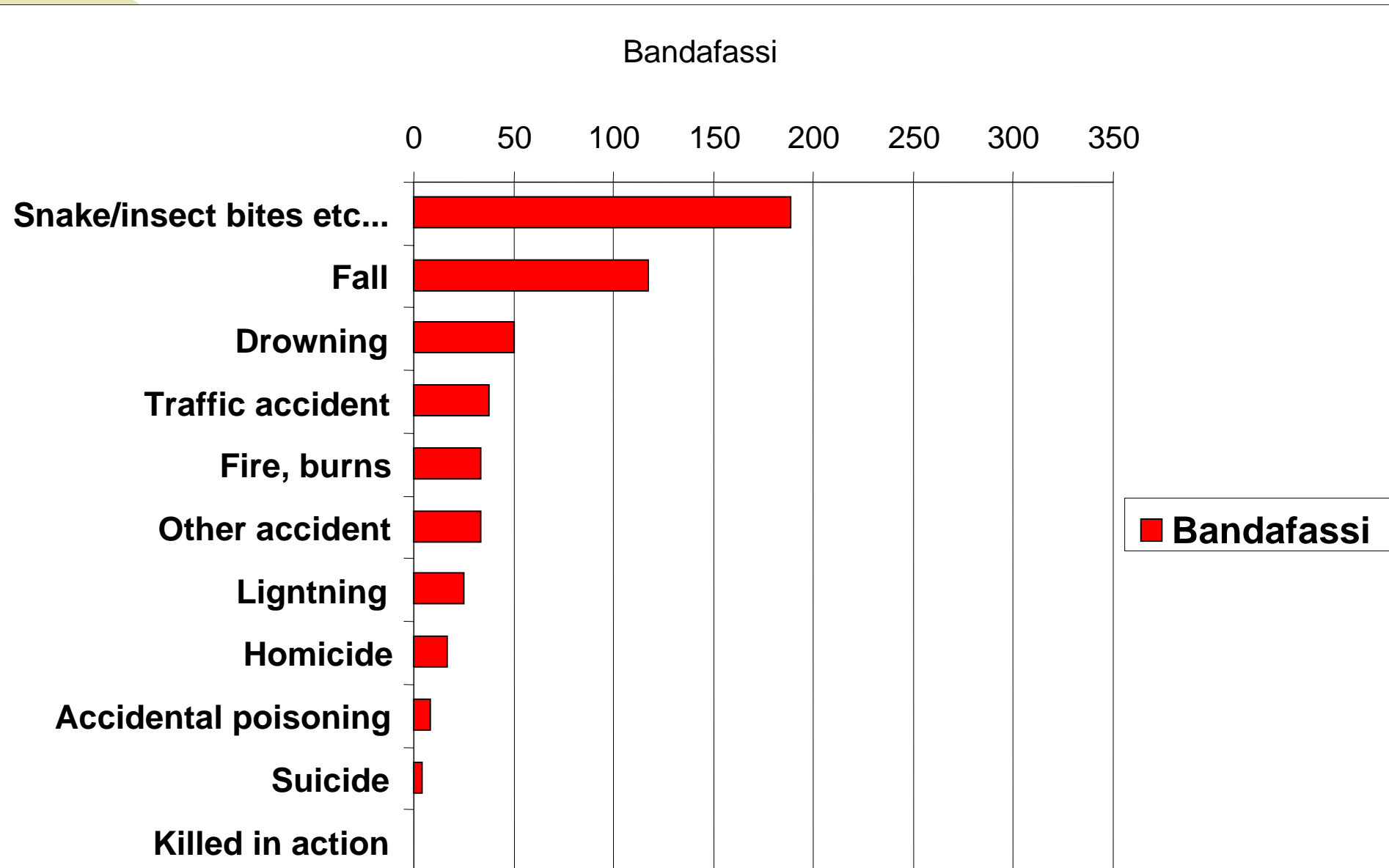
Sex differences are large

What explains the site differences ?

- Detailed analysis of causes of death

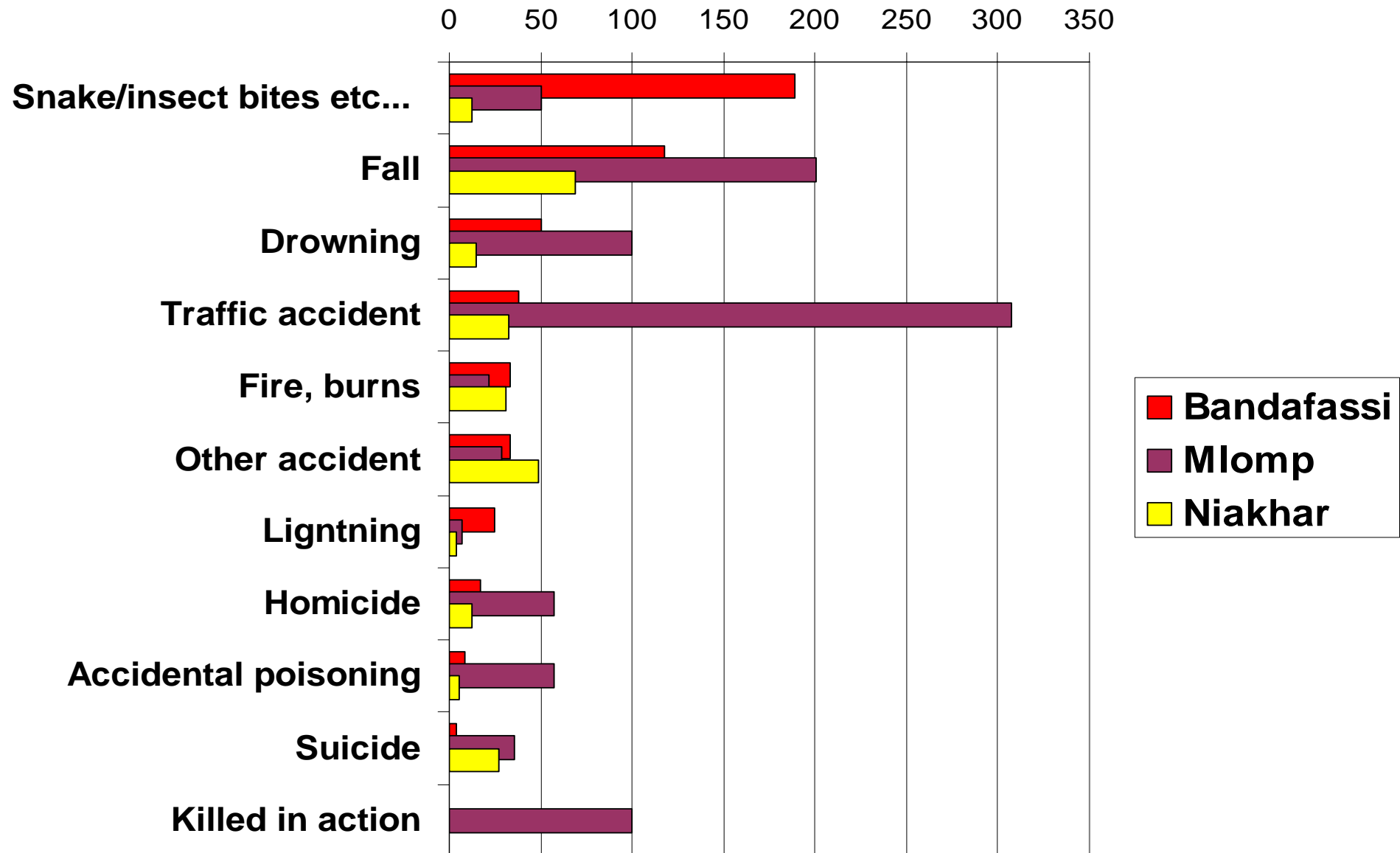
Causes of violent deaths

Number of violent deaths per year and per million inhabitants, both sexes



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Number of violent deaths per year and per million inhabitants, both sexes





Snake bite, an important cause of death at Bandafassi

- 130 annual deaths per million inhabitants (more than road accident mortality in Europe)
- factors :
 - Low population density and an environment which allows the maintenance of wildlife
 - activities (agriculture, hunting) favour contacts between humans and wild animals
 - Snake bites are frequent: 7 per year per thousand inhabitants
 - Snake bites are not treated in time



Snake bites

	BANDAFASSI	MLOMP	NIAKHAR
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Mortality (per year per thousand inhabitants)	130	36	15

Conclusions



- A « rural » mortality:
 - death from road accidents is still rare
 - But many deaths from falls, bites, etc.
- Differences between regions are large:
 - level
 - causes of death
- How to extrapolate to the whole country?
 - A difficult task
 - Make use of density and activity maps?





**Thanks for
your
attention**



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